



**Quadrennial Energy Review
Second Installment
Electricity: Generation to End-Use
Stakeholder Meeting #1
February 4, 2016
Washington, DC
U.S. Capitol Visitors Center
1st St. & East Capitol Street, NE
Congressional Auditorium**

Panelist Bios



Dr. Ernest Moniz, United States Secretary of Energy

As United States Secretary of Energy, Dr. Ernest Moniz is tasked with implementing critical Department of Energy missions in support of President Obama's goals of growing the economy, enhancing security and protecting the environment. This encompasses advancing the President's all-of-the-above energy strategy, maintaining the nuclear deterrent and reducing the nuclear danger, promoting American leadership in science and clean energy technology innovation, cleaning up the legacy of the cold war, and strengthening management and performance.

Prior to his appointment, Dr. Moniz was the Cecil and Ida Green Professor of Physics and Engineering Systems at the Massachusetts Institute of Technology (MIT), where he was a faculty member since 1973. At MIT, he headed the Department of Physics and the Bates Linear Accelerator Center. Most recently, Dr. Moniz served as the founding Director of the MIT Energy Initiative and as Director of the MIT Laboratory for Energy and the Environment where he was a leader of multidisciplinary technology and policy studies on the future of nuclear power, coal, nuclear fuel cycles, natural gas and solar energy in a low-carbon world.

From 1997 until January 2001, Dr. Moniz served as Under Secretary of the Department of Energy. He was responsible for overseeing the Department's science and energy programs, leading a comprehensive review of nuclear weapons stockpile stewardship, and serving as the Secretary's special negotiator for the

disposition of Russian nuclear materials. From 1995 to 1997, he served as Associate Director for Science in the Office of Science and Technology Policy in the Executive Office of the President.

In addition to his work at MIT, the White House and the Department of Energy, Dr. Moniz has served on a number of boards of directors and commissions involving science, energy and security. These include President Obama's Council of Advisors on Science and Technology, the Department of Defense Threat Reduction Advisory Committee, and the Blue Ribbon Commission on America's Nuclear Future.

A member of the Council on Foreign Relations, Dr. Moniz is a Fellow of the American Association for the Advancement of Science, the American Academy of Arts and Sciences, the Humboldt Foundation, and the American Physical Society.

Dr. Moniz received a Bachelor of Science degree summa cum laude in Physics from Boston College, a Doctorate in Theoretical Physics from Stanford University, and honorary degrees from the University of Athens, the University of Erlangen-Nuremberg, Michigan State University and Universidad Pontificia de Comillas.



Dr. John P. Holdren, Assistant to the President for Science and Technology, Director of the White House Office of Science and Technology, and Co-Chair of the President's Council on Advisors on Science and Technology (PCAST).

Prior to joining the Obama administration Dr. Holdren was Teresa and John Heinz Professor of Environmental Policy and Director of the Program on Science, Technology, and Public Policy at Harvard University's Kennedy School of Government, as well as professor in Harvard's Department of Earth and Planetary Sciences and Director of the independent, nonprofit Woods Hole Research Center. Previously he was on the faculty of the University of California, Berkeley, where he co-founded in 1973 and co-led until 1996 the interdisciplinary graduate-degree program in energy and resources. During the Clinton administration Dr. Holdren served as a member of PCAST through both terms and in that capacity chaired studies requested by President Clinton on preventing theft of nuclear materials, disposition of surplus weapon plutonium, the prospects of fusion energy, U.S. energy R&D strategy, and international cooperation on energy-technology innovation.

Dr. Holdren holds advanced degrees in aerospace engineering and theoretical plasma physics from MIT and Stanford. He is a member of the National Academy of Sciences, the National Academy of Engineering, and the American Academy of Arts and Sciences, as well as a foreign member of the Royal Society of London and former president of the American Association for the Advancement of Science. He served as a member of the MacArthur Foundation's Board of Trustees from 1991 to 2005, as Chair of the National Academy of Sciences Committee on International Security and Arms Control from 1994 to 2005, and as Co-Chair of the independent, bipartisan National Commission on Energy Policy from 2002 to 2009. His awards include a MacArthur Foundation Prize Fellowship, the John Heinz Prize in Public Policy, the Tyler Prize for Environmental Achievement, and the Volvo Environment Prize. In December 1995 he gave the acceptance lecture for the Nobel Peace Prize on behalf of the Pugwash Conferences on Science and World Affairs, an international organization of scientists and public figures in which he held leadership positions from 1982 to 1997.



Dan Utech, Deputy Assistant to the President for Energy and Climate Change and White House Domestic Policy Council

Dan Utech is the Director for Energy and Climate Change at the White House Domestic Policy Council.

As one of the President's top White House advisors on energy and climate change, Mr. Utech coordinates policy development and implementation on these issues across the Administration. Mr. Utech joined the Administration in 2009, serving as a Senior Advisor to Secretary Chu until moving to the White House in May of 2010. For the last five years, he has been a key player in advancing many of the President's top energy and climate priorities, including new fuel economy standards, renewable fuels, reducing carbon pollution from power plants, and supporting clean energy deployment in the United States.

Prior to joining the Administration, Mr. Utech served for 10 years in the Senate, where he worked on the Senate Environment and Public Works Committee and spent 5 years as Senator Clinton's top advisor on energy and environmental issues.

Mr. Utech grew up in upstate New York and is a graduate of Amherst College and Yale University.



Congressman Earl Blumenauer (OR-3)

A lifelong resident of Portland, Oregon, Congressman Blumenauer has devoted his entire career to public service.

While still a student at Lewis and Clark College, he spearheaded the effort to lower the voting age both in Oregon and at the national level. He was elected to the Oregon Legislature in 1972, where he served three terms and Chaired the House Education and Revenue Committee in 1977-78. In 1978, he was elected to the Multnomah County Commission, where he served for eight years before being elected to the Portland City Council in 1986. There, his 10-year tenure as the Commissioner of Public Works demonstrated his leadership on the innovative accomplishments in transportation, planning, environmental programs and public participation that have helped Portland earn an international reputation as one of America's most livable cities.

Elected to the US House of Representatives in 1996, Mr. Blumenauer has created a unique role as Congress' chief spokesperson for Livable Communities: places where people are safe, healthy and economically secure. From 1996 to 2007, he served on the Transportation and Infrastructure Committee, where he was a strong advocate for federal policies that address transportation alternatives, provide housing choices, support sustainable economies and improve the environment. He was a member of the Foreign Affairs Committee from 2001 to 2007, and vice-chair of the Select Committee on Energy Independence and Global Warming from 2007 to 2010. He is currently a member of the Ways and Means Committee and the subcommittees on Health, Social Security and Trade.

These committee assignments give Mr. Blumenauer a unique platform from which to initiate and further legislation that addresses and mitigates the effects of global warming. His priorities also include

healthcare reform, honest trade, financing critical infrastructure, building livable communities in a global economy, and ensuring economic security for working families.

A leading environmental advocate both in Oregon and Congress, Congressman Blumenauer has authored and co-sponsored legislation to preserve and protect public lands, shift the nation's energy policy towards renewable energy and energy efficiency, curb global warming, clean our nation's water bodies, and many others.

Panel 1: Bulk Power Generation and Transmission: How Can We Plan, Build, and Operate the Appropriate Amount for Future Needs?



Gerry Cauley, President and Chief Executive Officer, North American Electric Reliability Corporation (NERC)

Gerry W. Cauley was named President and Chief Executive Officer of the North American Electric Reliability Corporation (NERC) in November 2009, and assumed the role in January 2010. In that role, Mr. Cauley is responsible for overseeing NERC's mission to ensure the reliability of the North American bulk power system. As President and CEO, Mr. Cauley leads key programs affecting over 1900 bulk power system owners, operators, and users, including standards and training, critical infrastructure, risk analysis, compliance monitoring, enforcement, situation awareness, reliability assessment, and government relations. Mr. Cauley also oversees the operation of eight regional entities engaged in implementation of delegated responsibilities.

From 2007 to 2009, Mr. Cauley served as President and Chief Executive Officer of the SERC Reliability Corporation, a reliability region covering 16 states in the southeastern and central United States. During this time he established new programs for monitoring and enforcing compliance with mandatory standards, developed training and educational programs, and a program to track reliability recommendations.

Prior to his CEO career, Mr. Cauley served as Vice President and Director of Standards at NERC and was instrumental in preparing NERC's application to become the ERO. He spearheaded the development of an initial set of standards to ensure the reliability of the bulk power system in North America. Mr. Cauley was also a lead investigator of the August 2003 Northeast blackout and coordinated the NERC Y2K program, supervising the reporting and readiness of 3,100 electric organizations in the United States and Canada.

Additionally, Mr. Cauley has served in various positions of leadership during his career, including program manager of grid operations and planning at the Electric Power Research Institute, training consultant for electric system operations, nuclear and fossil plant operations, substations, and distribution. He also served as an officer in the U.S. Army Corps of Engineers. Mr. Cauley has a Bachelor's degree from the U.S. Military Academy at West Point, a Master's degree from the University of Maryland in Nuclear Engineering, and a Master's degree in Business Administration from Loyola College - Baltimore. Mr. Cauley is a registered Professional Engineer in the Commonwealth of Virginia.



Thomas R. Kuhn, President, Edison Electric Institute

Tom Kuhn is President of the Edison Electric Institute, the association of investor-owned electric companies whose members generate and distribute approximately three-quarters of the nation's electricity. In addition, EEI has a growing number of international electric companies as Affiliate Members and industry suppliers and related organizations as Associate Members. Mr. Kuhn joined the Institute in 1985 as executive vice president, was named chief operating officer in 1988, and elected president in 1990.

Prior to joining the Institute, Mr. Kuhn was president of the American Nuclear Energy Council, which subsequently merged with the Nuclear Energy Institute. The Council represented virtually all of the companies in the commercial nuclear power industry. He joined the Council in 1975 as vice president, government affairs, and became president in 1983.

From 1972 to 1975, he headed the energy section of the investment banking firm, Alex Brown and Sons. Prior to that, from 1970 to 1972, Mr. Kuhn was White House Liaison Officer to the Secretary of the Navy.

Mr. Kuhn received a BA in Economics in 1968 from Yale University, served as a Naval Officer following his graduation, and completed a Master's in Business Administration in 1972 from George Washington University. He completed the Stanford University Graduate School of Business Senior Executive Program in 1989.

Mr. Kuhn served on the Secretary of Energy's Advisory Board and the Board of the U.S. Chamber of Commerce. He currently serves on the Boards of the United States Energy Association, the Electric Drive Transportation Association, and the American Council for Capital Formation. He is Chairman-Emeritus of the Committee of 100 of the U.S. Chamber of Commerce, Chairman-Emeritus of the American Society of Association Executives, and past-chairman of the ASAE/Key Industry Association Committee and of the Trade Association Liaison Council.

Mr. Kuhn was chosen as Association Executive of the Year 2000 by Association TRENDS magazine. He was the recipient of The Energy Daily's 2000 Public Policy Leadership Award. He received the Alliance to Save Energy's 2004 Chairman's Award. Mr. Kuhn also received the 2009 ASAE/Center for Association Leadership's Key Award. He is the recipient of the Fund for American Studies (TFAS) 2014 Congressional Scholarship Award.

Mr. Kuhn is Chairman-Emeritus of the National Multiple Sclerosis Society, and currently serves on the Board of the National Capital Chapter. He also serves on the Boards of the U.S. Navy Memorial Foundation. From 2006 to 2008, Mr. Kuhn served on the Board of the National Park Foundation. Mr. Kuhn was awarded the Bess Goodman Humanitarian Award in 2000. He served as 1992 and 1997 chairman of the Associations Division, United Way Campaign, and chairman of the 1996 through 1998 National Alliance to End Homelessness Awards dinners.



John E. Shelk, President and CEO, Electric Power Supply Association

Mr. Shelk is the President and Chief Executive Officer of the Electric Power Supply Association (EPSA). EPSA is the national trade association representing competitive power suppliers active in the U.S. and global markets, including independent power producers, power marketers and other energy service providers. Mr. Shelk is responsible for the overall management of the association and its strategic direction, including programs in the areas of legislative affairs, regulatory policy development and public affairs. He serves as an *ex officio* member of the association's Executive Committee.

Mr. Shelk has had a long and distinguished career in public service and in the private sector with an emphasis on energy and environmental issues. Prior to joining EPSA, he was the Senior Vice President of Government Affairs for the National Mining Association, where he directed a federal legislative advocacy team on behalf of the nation's coal and hard rock mining sectors.

Mr. Shelk's government career was capped with service as Republican Counsel to the House Committee on Energy and Commerce, where he worked on matters before the Subcommittee on Energy and Power and the Subcommittee on Oversight and Investigations. These matters included major responsibilities associated with the Clean Air Act Amendments of 1990 and the Energy Policy Act of 1992.

Following his government service, Mr. Shelk assumed a series of positions with increasing responsibility in a variety of business sectors: Federal Affairs Counsel for The Harford Financial Services Group; Assistant General Counsel for ITT Corporation; Vice President of the American Gaming Association; and Director of Federal Relations for Calpine Corporation. He also worked in the private practice of law for Gibson, Dunn & Crutcher.

Mr. Shelk earned his J.D. degree with honors from Georgetown University Law Center and a B.A. degree in American Government from Georgetown's College of Arts & Sciences, where he was elected to Phi Beta Kappa and selected as a George F. Baker Scholar.



Sue Kelly, President and CEO, American Public Power Association

Sue Kelly has been president and CEO of the American Public Power Association (APPA) since April 2014. Prior to becoming president and CEO, Ms. Kelly was APPA's senior vice president, policy analysis and general counsel. In that capacity, she helped APPA and its members in energy policy formulation and with policy advocacy before the Federal Energy Regulatory Commission (FERC), federal courts, and other governmental and industry policy forums.

From 1998–2004, Ms. Kelly was a principal with the Washington, D.C. law firm of Miller, Balis & O'Neil, P.C. She represented cooperatively and publicly owned electric utilities and their trade associations, as well as other governmental entities, assisting them with restructuring-related issues before the FERC, federal appellate courts, and state public utility commissions. From 1995–1998, Ms. Kelly served as the Senior Regulatory Counsel for the National Rural Electric Cooperative Association (NRECA). She represented NRECA before the FERC, state public utility commissions and courts, and served as a liaison from NRECA to many industry groups.

In March 2008, she was appointed to a one-year term on the U.S. Department of Energy's Electricity Advisory Committee (EAC). She served a second term on the EAC from June 2012 to April 2014. In April 2010, Kelly was elected president of the Energy Bar Association. In January 2015, she was selected to serve as an associate member on the Commodity Futures Trading Commission's Energy and Environmental Markets Advisory Committee. She is also a member of the E Source Advisory Board.

Ms. Kelly is a frequent speaker on energy-related topics. She has given presentations to many industry groups, including the National Association of Regulatory Utility Commissioners, the Organization of PJM States, Inc., the National Association of State Utility Consumer Advocates, the Energy Bar Association, the American Bar Association, the American Antitrust Institute, the E Source Forum, and the Harvard Electricity Policy Group. She has also appeared before federal and state administrative agencies, and testified before committees of the U.S. Congress and state legislatures.

Ms. Kelly was named one of Washington's "Most Powerful Women" in the November 2015 issue of Washingtonian magazine in the "Business, Labor, and Lobbying" category.

Ms. Kelly earned her J.D. degree with high honors from the George Washington University in 1980, and her A.B. degree in Honors Interdisciplinary Studies and Economics, *magna cum laude*, from the University of Missouri in 1977.



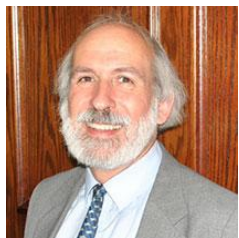
Jay Morrison, Vice President, Regulatory Issues, National Rural Electric Cooperative Association

Mr. Morrison leads the Regulatory Issues Unit of NRECA's Government Relations Department, where he works with a staff of professionals representing NRECA and its members on matters relating to federal and state utility regulation, power supply and delivery. Since joining NRECA in 1998, Mr. Morrison has worked extensively on issues relating to wholesale market design, power supply and delivery, industry restructuring, renewable energy, energy efficiency, distributed generation, and the smart grid.

In 1993, Mr. Morrison earned his MPP, from the John F. Kennedy School of Government and his JD, *magna cum laude*, from Harvard Law School where he served on the Harvard Law Review. Mr. Morrison earned his BA, *summa cum laude*, from UCLA in 1989. Mr. Morrison has also clerked for the Honorable A. Raymond Randolph on the D.C. Circuit, served as counsel to the U.S. Senate Committee on Labor and Human Resources, and represented cooperatives and other clients before the Federal Energy Regulatory Commission, Congress, and the courts with the firm of Paul, Hastings, Janofsky & Walker.

Mr. Morrison is active with the Energy Bar Association where he presently serves as a "Dean" for the primer program, the Energy Law Journal for which he is an editor, and the American Bar Association Public Utility, Communications, and Transportation Section for which he is a member of the Council and a vice-chair of the electricity committee.

Panel 2: Electricity Distribution and End-Use: How Do We Manage Challenges and Opportunities?



Steve Nadel, Executive Director, American Council for an Energy Efficient Economy

Prior to his promotion to executive director in 2001, Steven Nadel served as deputy director of the organization and director of ACEEE's Utilities and Buildings programs. He has worked in the energy efficiency field for more than 30 years and has over 100 publications. He has testified many times before Congress on energy efficiency subjects and also testified before multiple state legislatures. He was a major contributor to national energy legislation passed by Congress in 1987, 1992, 2005, and 2007. His current research interests include utility-sector energy efficiency programs and policies, state and federal energy and climate change policy, and appliance and equipment efficiency standards. He joined ACEEE in 1989.

Prior to ACEEE, Mr. Nadel planned and evaluated energy efficiency programs for New England Electric, a major electric utility; directed energy programs for the Massachusetts Audubon Society, Massachusetts' largest environmental organization; and ran energy programs for a community organization working on housing rehabilitation in the poorest neighborhoods of New Haven, CT.

Mr. Nadel earned a master of science in energy management from the New York Institute of Technology and a Master of Arts in Environmental Studies and a Bachelor of Arts in Government from Wesleyan University.

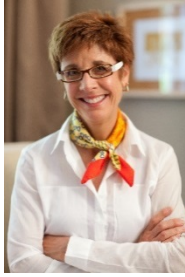


Tom Kimbis, General Counsel and Vice President of Executive Affairs, Solar Energy Industries Association

Mr. Kimbis leads the development of strategy to promote solar energy across the United States. As Vice President of Executive Affairs, he oversees the departments of Executive Affairs and Research. He also provides legal services to SEIA as General Counsel. Mr. Kimbis has been working in renewable energy since 2000, when he began supporting research, analysis, legislative, and planning efforts across all energy efficiency and renewable energy technologies for the U.S. Department of Energy (DOE).

In 2005, he created the Market Transformation effort within the Solar Energy Technologies Program (SETP) at DOE to help technologies cross the chasm from R&D to commercialization. Mr. Kimbis served as Director of Market Transformation through 2009, when he began service as Acting Program Manager, managing the entire \$170 million solar energy program of the United States. While at DOE, Mr. Kimbis was a founder of the Solar America Initiative, a billion-dollar effort to accelerate solar commercialization. He led the creation of the Solar America Cities program, a DOE partnership with U.S. cities to develop innovative methods for the adoption of solar energy technologies.

Prior to his work in solar, Mr. Kimbis headed a DOE legislative team, founded a real estate investment firm, and practiced litigation for a multinational law firm. He currently serves as Chairman of The Solar Foundation, a nonprofit promoting the increased use of solar energy through education and research.



Lisa Wood, Executive Director, The Edison Foundation Institute for Electric Innovation

Lisa Wood is Vice President of The Edison Foundation and Executive Director of the Institute for Electric Innovation (IEI). As Executive Director of IEI she promotes the sharing of information, ideas, and experiences among regulators, policymakers, technology companies, thought leaders, and the electric power industry; collaborates with a Management Committee of over 20 electric utility chief executive officers; and provides thought leadership on current issues and innovation in the power sector through articles, dialogues, and speaking engagements. Under Ms. Wood's leadership, IEI published three recent books: *Innovations across the Grid: Partnerships Transforming the Power Sector*, in 2013; *Innovations Across the Grid: Volume II*, in 2014; and *Thought Leaders Speak Out: The Evolving Electric Power Industry* in 2015.

Ms. Wood is currently an Adjunct Professor at Johns Hopkins University School of Advanced International Studies and is a Nonresident Senior Fellow in the Energy Security and Climate Initiative at The Brookings Institution. She was previously an Adjunct Professor at Georgetown University School of Foreign Service. Ms. Wood is an active member of both for-profit and not-for-profit boards including:

- Advisory Board, GE Energy *New Business*;
- Board of Directors, Energate, Inc.;
- Board of Directors, National Energy Foundation.

She previously served on the Executive Leadership Group for the State Energy Efficiency Action Network; the Advisory Board for Johnson Controls' Institute for Building Efficiency; the Advisory Board for American Efficient; and the Board of Directors of the Midwest Energy Efficiency Alliance. Ms. Wood is a member of the International Association for Energy Economics.

Prior to launching IEI, Ms. Wood was a Principal with The Brattle Group and Director of Brattle's Washington DC office; a Principal with PHB Hagler Bailly; and a Program Director at RTI International. In those positions, she directed economic, financial, and market analysis studies for leading electric utilities nationwide.

Ms. Wood holds a Ph.D. in Public Policy and Management from the Wharton School of the University of Pennsylvania; an M.A. from the University of Pennsylvania; and a B.A. from Rutgers College.



David Springe, Executive Director, National Association of Utility Consumer Advocates

David Springe was named Executive Director of the National Association of State Utility Consumer Advocates (NASUCA) in December of 2015. Prior to his appointment at NASUCA, Mr. Springe served as Consumer Counsel of the Kansas Citizens' Utility Ratepayer Board (CURB) from 2002-2015. CURB is the statutory advocate for residential and small commercial utility customers in proceedings before the Kansas Corporation Commission, Kansas courts and the Kansas legislature. Prior to being named Consumer Counsel at CURB, Mr. Springe spent nine years as an economist and expert witness for both CURB and the Kansas Corporation Commission.

Mr. Springe received his M.A. in Economics and Juris Doctor from the University of Kansas. Mr. Springe

has represented consumer interests on numerous boards, including serving as Vice-Chair of the EPRI Energy Efficiency and Grid Modernization Public Advisory Board, as well as serving on the Edison Foundation's Institute for Electric Efficiency Advisory Board, the University of Missouri Financial Research Institute Advisory Board and the New Mexico State University Center for Public Utilities Advisory Board. He also serves on the Energy Board of the Keystone Center. Mr. Springe was the President of the NASUCA from 2007-2009.



Commissioner Robert F. Powelson, Pennsylvania Public Utility Commission and First Vice President, National Association of Regulatory Utility Commissioners (NARUC).

Robert F. Powelson was first nominated to the Pennsylvania Public Utility Commission (PUC) on June 19, 2008, by Governor Edward G. Rendell, to fill the remainder of an unexpired term. The Pennsylvania Senate unanimously confirmed Powelson to serve as Commissioner on June 30, 2008. Commissioner Powelson was renominated by Governor Rendell for a full five-year term on February 12, 2009, and again unanimously confirmed by the Pennsylvania Senate on April 22, 2009.

On February 24, 2011, Governor Tom Corbett appointed Powelson as PUC Chairman, a position he held until May 7, 2015. On February 18, 2014, Governor Corbett nominated Powelson to a second full five-year term on the PUC. The Pennsylvania Senate unanimously confirmed Powelson for another term as a Commissioner on March 19, 2014. His term as a Commissioner expires on April 1, 2019.

Commissioner Powelson was elected Second Vice President of the National Association of Regulatory Utility Commissioners (NARUC) on November 18, 2014. He was appointed to the NARUC Board of Directors on March 15, 2011, and serves on the NARUC Committee on Water, which he chaired from 2012-14; the Committee on Critical Infrastructure; and the Subcommittee on Nuclear Issues-Waste Disposal. In addition to his national duties, Powelson was President of the Mid-Atlantic Conference of Regulatory Utilities Commissioners (MACRUC) from June 2014 to June 2015. Powelson also is a voting member of the National Regulatory Research Institute (NRRI). In 2012, he was appointed to serve on the Electric Power Research Institute (EPRI) Advisory Council and was recently re-appointed to serve another term, which expires August 2018.

On March 8, 2011, Governor Corbett invited Powelson to serve as a member of the Marcellus Shale Advisory Commission. The Advisory Commission reviewed the Commonwealth's existing statutes, regulations and policies and provided recommendations to ensure that Pennsylvania maximizes the opportunity that Marcellus Shale presents in the most responsible manner possible.

Commissioner Powelson has served on the Board of Trustees of Drexel University since 2013 and served on the Board of Directors of Lincoln University from 2000-2013.

Under Commissioner Powelson's leadership, Pennsylvania ratepayers have had an active voice on issues such as progressive ratemaking, utility infrastructure replacement, broadband development, and expanded use of natural gas throughout the Commonwealth of Pennsylvania.